	NEW		REVISED		DELETE	X	NO CHANGE		CHAPTER/SECTION IN NEW ASTMP

STO # III.IS.1999.02

Joint Intelligence, Surveillance, and Reconnaissance (JISR)

JISR is intended to provide the warfighter, at all echelons, a comprehensive near-real time view of ISR information based on both traditional and selected non-traditional sensors to enhance situation awareness. The warfighter will be able to access data from a combination of national, joint and tactical assets using any workstation equipped with a browser. JISR will provide advanced web based visualization tools to increase the warfighter's understanding of enemy operations in an expanded battlespace. The objective is a truly network centric intelligence system to support the FCS and Objective Force.

FY99-00: Completed initial requirements, market survey of GOTS/COTS, system design, and initial prototype

FY01-02: Continue prototype spiral development and assess system performance and military utility in tactical exercises each year to include ARCENT's Lucky Sentinel and USMC I MEF exercise (MEFEX). (TRL 4)

FY03: Demonstrate Initial Operational Capability (IOC) and begin transition to the objective system.(TRL 5)

FY04: Transition to objective system and deploy in support of CENTCOM exercises.(TRL 6)

FY05: CENTCOM leave behind capability (i.e. maintenance, spares, documentation, and Joint Precision Strike Demo. Office support).

STO MANAGER:	FSO:	TRADOC POC:
Richard Gray	Robert Saunders	COL William Phelps
Joint Precision Strike Demo. Office	ASA(ALT)	Battle Command Battle Lab-Huachuca
(703) 704-1952	(703) 601-1546	(520) 538-0570
richard.gray@nvl.army.mil	robert.saunders@saalt.army.mil	william.phelps@hua.army.mil

SUPPORTS: BCBL (H), MMBL, PEO IEW&S, ASPO, PM FCS, Objective Force.

No change

STO III.IS.1999.02 JISR

1. What is the problem?

- Operational and tactical level forces do not share a timely common picture
- Sensor integration is manual, slow, and difficult to exploit
- ISR systems, databases, and processors are not interoperable
- ISR visualization is inadequate

2. What are the barriers to solving this problem?

- Limited bandwidth, lack of data mediation and translation, unique applications

3. How will you overcome those barriers?

- Use of information agent, advanced metadata, virtual reality, OODBMS, and web interface technology

4. What is the capability you are developing & where is it described?

- Near-real-time traditional and non-traditional ISR in a tailorable user-friendly visualization of the battlespace.

MMB97-012; MMB97-017; MMB97-019; MI98-001 ;MI98-003; MI98-007; JISR ACTD Management Plan

5. What is the product of this STO?

- Independent DII COE software segments (Geospatial/ temporal distributed DBMS, Information Agent for legacy systems, advanced visualization ,and web interface access)

6. Quantitative Metric

- TRL: Begin - 4. End - 6.
- Increase in sensor feeds (x2), timeliness (<1min or 50% faster), # of users accessing shared data (50%+)

7. What is the Warfighter Payoff?:

- Integrated visibility of bottom-up and top-down sensor data and intelligence information provides shared understanding and synchronized operations cycles at Operational and Tactical levels
- Improved visualization and ease of use (75% reduction in decision and training time)
- Improved interoperability with other services' C4I systems

8. Transition Milestones:

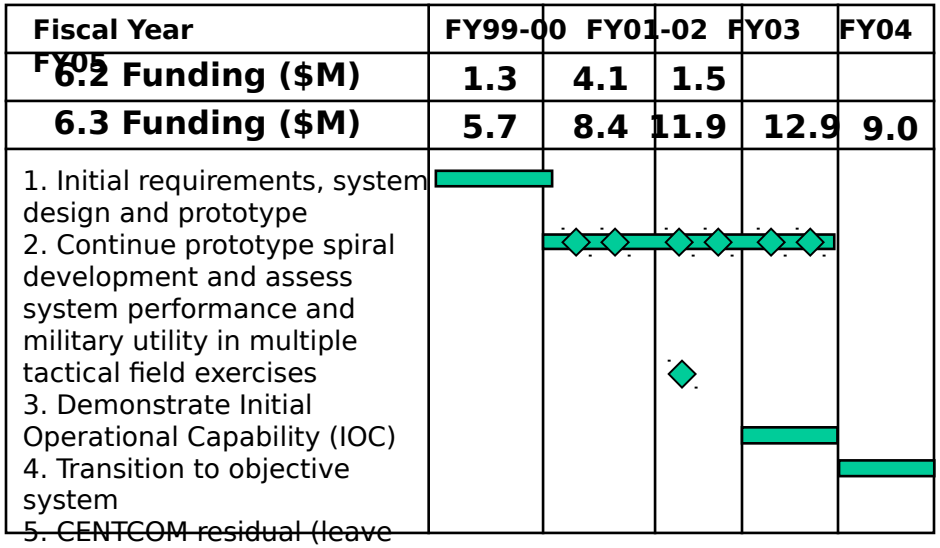
-JISR products provided to user stakeholders for use and evaluation beginning in FY01

-Objective JISR software transitioned to ASAS and other services' DII COE compliant systems to include GCCS, GCCS-M, TBMCS, and IOS beginning in FY 04

9. Endorsements: BCBL(H), CENTCOM, ASA(ALT), OSD

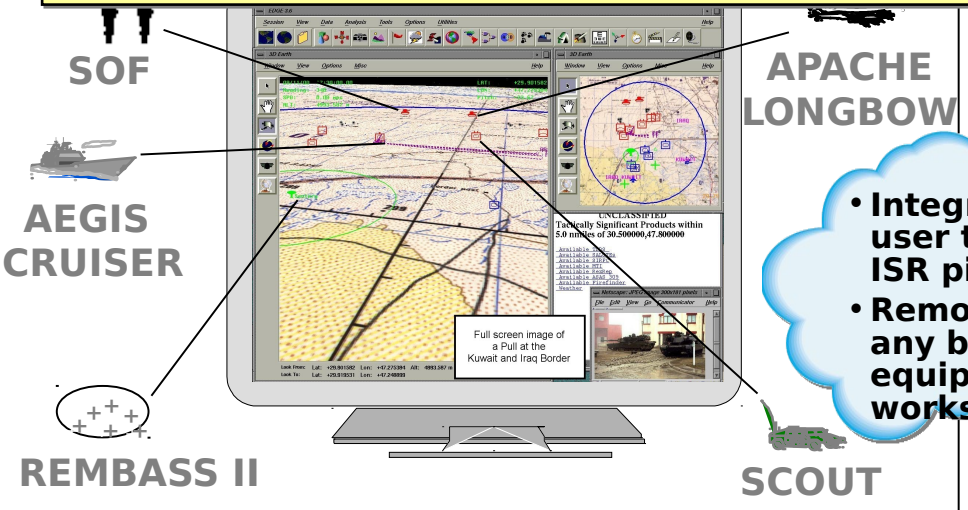
WHAT IS THE SCHEDULE AND COST?
(Key Milestones)

Fiscal Year	FY99-00	FY01-02	FY03	FY04	FY05
6.2 Funding ($M)	1.3	4.1	1.5		
6.3 Funding ($M)	5.7	8.4	11.9	12.9	9.0


1. Initial requirements, system design and prototype
2. Continue prototype spiral development and assess system performance and military utility in multiple tactical field exercises
3. Demonstrate Initial Operational Capability (IOC)
4. Transition to objective system
5. CENTCOM residual (leave behind) capability

Joint Intelligence, Surveillance and Reconnaissance

Objective: Provide More Timely and Relevant Multi-Service, Multi-Echelon ISR Information to Operational and Tactical Users



- Integrated, timely, user tailored, Joint ISR picture
- Remote access via any browser equipped workstation

Pacing Technologies:

- **Visualization Software**
- **Information Agents**
- **Web Based Architectures**

Other STO Attributes:

- Executed as an ACTD (FY00 start)
- Nominate as DTO: Approved DTO now
- Nominate as Int'l Program: No
- Expected ORD Date: ASAS ORD
- Total Program Cost: $62.5 M
- Is TPP Required? NO
- Is TPP Approved? N/A

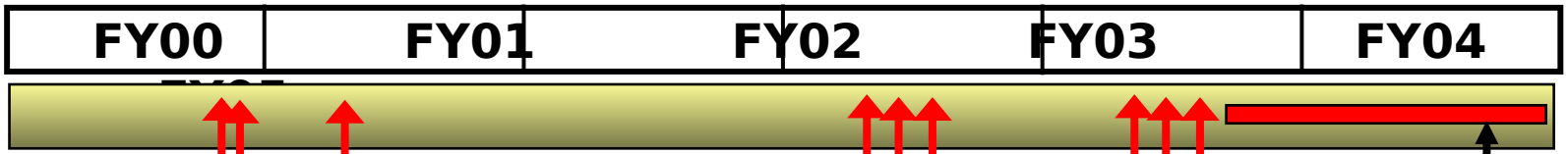
Modeling and Simulation:

- Leverages and builds upon existing CERDEC and JPSD M&S capabilities
  - Performance modeling
  - Virtual/constructive DIS/HLA environments
- JPSD and CERDEC facilities interconnected via SIPRNET (FY01)
- Augmenting field exercise simulations to provide more robust and representative array of ISR sensors to better exercise C4ISR processes and demonstrate JISR developed capabilities

Significantly improved joint situation awareness

Joint Intelligence, Surveillance and Reconnaissance

(STO III.IS.1999.02)



TRL=4:
Visualization software
Metrics:
Browser based 2D map and 3D snapshot

TRL=5+:
Visualization software
Metrics:
Browser based 3D visualization

TRL=6+:
Visualization software
Metrics:
Browser based 2D map and 3D snapshot

Transition
- Final Military Utility Assessment
- Operational Assessment
- Leave Behind Support
- Training/TTP Package

TRL=4:
Information Agents
Metrics:
Direct data base access to ASAS & JSTARS CGS

TRL=5+:
Information Agents
Metrics:
Direct data base access all key user ISR sources

TRL=6+:
Information Agents
Metrics:
Agent tool kit to add/ maintain ISR sources

TRL=4:
Web based architecture
Metrics:
Access via any browser

TRL=5+:
Web based architecture
Metrics:
XML based data exchange

TRL=6+:
Web based architecture
Metrics:
JINI based automatic source registration

- Spiral Development Approach
- Continuous User Feedback
- Demonstration/Assessment at Multiple Field Exercises Each Year:
  - Coalition Joint Task Force Kuwait/Third U.S. Army
  - First Marine Expeditionary Force
  - Army Early Entry Force Brigade

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Program Status

JOINT INTELLIGENCE , SURVEILLANCE, AND RECONNAISANCE (JISR)

Planned Accomplishments:

- *1st Critical Design Review*
- *Prototype Development*
- *Updated MOA with PM IF*
- *Deliver Server to ARCENT*
- *Operational Manager User WIPT*
- *ARCENT Deployment with Corrective Actions*
- *Support I MEF Exercise (I MEF)*
- *JISR 1.0 Release*

Actual Accomplishments:

- *Completed Jan / Passed Review*
- *Completed Prototype Phase*
- *Pending Signature 18 March*
- *Delivered*
- *Complete 13 March*
- *Completed 10 March*
- *Pending - I MEF Decision*
- *On track / Due 19 June*

Transition Plans/Status:

- *Transition to PM-ASAS- PM IOS (USMC)*
- *Browser Technology will Transition to Respective Service and Joint C4ISR programs, to include GCCS and GCCS Integrated imagery Intelligence (GCCS-13)*

Rationale/Comments: